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(54) Title: IMPROVED MATERIALS FOR CONSTRUCTING CELL-CHIPS, CELL-CHIP COVERS, CELL-CHIP COATS, PROCESSED CELL-CHIPS AND USES THEREOF

(57) Abstract: A chip-device is provided for holding living cells in a plurality of wells disposed on the surface of a carrier, characterized in that the wells are configured to influence the proliferation of living cells in the wells, for example by changing the size of the wells, delaying or inhibiting cell-proliferation, delaying or inhibiting cell adhesion, or allowing cell proliferation inside or through components of the device itself. The influence on cell proliferation is achieved, for example, by coating the inside of the wells or fashioning the carrier from materials such as gels, especially hydrogels, polydimethylsiloxane, elastomers or polymerized para-xylylene molecules. Provided is also a gel-cover for any cell-holding device. Provided is also a method for making the devices of the present invention. Provided is also a method of manipulating cells by covering wells where the cells are held with gel or by increasing the size of wells wherein cells are held. Provided is also a method of collecting cells from a biological sample onto a well-bearing device.



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